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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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09/778,010

02/05/2001

Albert D. Edgar

6233

7590

09/20/2004

Mark G. Bocchetti
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EXAMINER

KASSA, YOSEF

ART UNIT

PAPER NUMBER

2625

DATE MAILED: 09/20/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/778,010

Applicant(s)

EDGAR, ALBERT D.

Examiner

YOSEF KASSA

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 06 April 2004.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-27 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-27 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☒ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. §§ 119 and 120

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. _____.
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.
- 13) ☒ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application) since a specific reference was included in the first sentence of the specification or in an Application Data Sheet. 37 CFR 1.78.
- a) ☐ The translation of the foreign language provisional application has been received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121 since a specific reference was included in the first sentence of the specification or in an Application Data Sheet. 37 CFR 1.78.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449) Paper No(s) _____.
- 4) ☐ Interview Summary (PTO-413) Paper No(s). _____.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: _____.

Response to Arguments

1. Applicant's arguments, (page 8-12) filed on April 06, 2004, with respect to claims 1-27 under Loveridge et al (U.S. Patent 5,982,941) have been fully considered and are persuasive. Therefore, the rejection has been withdrawn. However, upon further consideration, a new ground(s) of rejection is made in view of Peters (U.S. Patent 5,592,571).

Drawings Objection

2. New corrected drawings in compliance with 37 CFR 1.121(d) is required in this application because the block decryptions/labels provided in Figs. 8-18 is not clear to the Examiner. Applicant is advised to employ the services of a competent patent draftsman outside the Office, as the U.S. Patent and Trademark Office no longer prepares new drawings. The corrected drawings are required in reply to the Office action to avoid abandonment of the application. The requirement for corrected drawings will not be held in abeyance.

Claim Rejections - 35 USC § 103

3. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 1-4, 6-16, 18-20 and 22-25 are rejected under 35 U.S.C. 103(a) as being unpatentable over Loveridge et al (U.S. Patent 5,982,941), and further in view of Peters (U.S. Patent 5,592,571).

With regard to claim 1, Loveridge et al discloses obtaining a first set of information, i.e., first photographic image resolution, representing an artifact, i.e., resolution difference or noise and brightness correlation (see col. 6, lines 9-27), determining which of the first set of information and the second set of information represents the artifact to a higher degree of quality (highest spatial resolution) and which represents the artifact to a lesser degree of quality (lower spatial resolution) (see col. 8, lines 20-26); and altering, i.e., up-sampling, the set of information representing the artifact to a lesser degree of quality, based on the set of information representing the artifact to a higher degree of quality (see col. 5, lines 41-46).

Loveridge et al did not explicitly call for a first degree of quality, obtaining a second set of information representing the artifact to a second degree of quality different from the first degree of quality. However, at the same field of endeavor Peters teaches this feature (see col. 3, lines 35-42). At the time of the invention, it would have been obvious to incorporate the teaching of Peters image enhancement process into Loveridge et al system. The motivation doing so is to provide a process of different smoothing factor to provide the information difference between least smoothed and the most smoothed data set.

With regard to claim 2, Loveridge et al discloses altering includes performing a Fourier transform analysis on the first set of information and the second set of information (see col. 5, lines 46-50).

With regard to claim 3, Loveridge et al discloses altering further includes using a phase of the set of information representing the artifact to a higher degree of quality to adjust a phase of the set of information representing the artifact to lesser degree of quality (see col. 6, lines 24-27).

With regard to claim 4, Loveridge et al discloses altering further includes using a magnitude of the set of information representing the artifact to a higher degree of quality to adjust a magnitude of the set of information representing the artifact to lesser degree of quality (see col. 5, lines 41-44).

With regard to claim 6, Loveridge et al discloses the first set of information and the second set of information are obtained using a scanner (see Fig. 2, item 74).

With regard to claim 7, Loveridge et al discloses the first set of information and the second set of information are obtained using a digital camera (see col. 4, lines 41-49).

With regard to claim 8, Loveridge et al discloses the first set of information and the second set of information are obtained using a digital film development system (see col. 4, lines 53-65).

Claim 9 is similarly analyzed as claim 1. As to the additional limitation of a film processing system including an image capturing station capable of obtaining sets of data representing an image formed in film; and a data processing system including a processor; memory operably coupled to processor; and a program of instructions

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capable of being stored in memory and executed by processor, program of instructions including instructions (see col. 4, lines 41-65).

Claims 10-12 are similarly analyzed as claims 2-4.

Claims 14-16, 18-20 and 22-24, 26 and 27 are similarly analyzed as claim 2-4 and 6-8.

Claim 13 is similarly analyzed as claim 1.

Claim Rejections - 35 USC § 103

4. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 5, 17, 21 and 25 are rejected under 35 U.S.C. 103(a) as being unpatentable over Loveridge et al (U.S. Patent 5,982,941) and Peters (U.S. Patent 5,592,571), and further in view of Natama (6,101,274).

With regard to claim 5, while Loveridge et al discloses the first set of information and the second set of information are digital image representation, he does not explicitly call for analog image. However, at the same field of endeavor Matama teaches this feature (see Fig. 1, items 10 and 11). At the time of the invention, it would have been obvious to incorporate the teaching of Matama's image reproduction system into Loveridge et al system. The motivation doing so is to provide an image reproduction

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method and apparatus for reproducing the image form an image signal such as negative film or reversal film.

Claims 17 and 25 are similarly analyzed as claim 5.

Claim 21 is similarly analyzed as claim 1. As to the additional limitations of shepherd artifact and sheep artifact (refer to Loveridge et al higher spatial resolution and lower spatial resolution).

Loveridge et al did not explicitly call for illumination an image. However, at the same field of endeavor Matama teaches this feature (see col. 9, lines 15-22). At the time of the invention, it would have been obvious to incorporate the teaching of Matama's a light regulating device into Loveridge et al system. The motivation doing so is to provide an image of the light, which light has passed through the film and image read out operation, is carried out with a CCD image sensor.

Other Prior Art Cited

5. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

US Patent No. (4,991,007) to Coley discloses image evaluation of at least one characteristic...

US Patent No. (5,319,465) to Swuyres et al discloses method for generating film quality images on videotape.

US Patent No. (6,728,402) to Ruggiero et al discloses noise reduction through comparative histograms.

US Patent No. (5,533,086) to Crins et al discloses X-Ray Examination apparatus.

Conclusion

6. Any inquiry concerning this communication or earlier communications from the examiner should be directed to YOSEF KASSA whose telephone number is (703) 306-5918. The examiner can normally be reached on Monday-Thursday from 8:00 AM to 6:30 PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, BHAVESH MEHTA can be reached on (703) 308-5246. The fax phone numbers for the organization where this application or proceeding is assigned is (703) 872-9306 for regular communication and (703) 872-9306 for after Final communications.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the customer service office whose telephone number is (703) 306-5631. The group receptionist number for TC 2600 is (703) 305-4700.

PATENT EXAMINER

Yosef Kassa

09/15/04.

A handwritten signature in black ink, appearing to read 'Yosef Kassa', is written over the printed name and date.